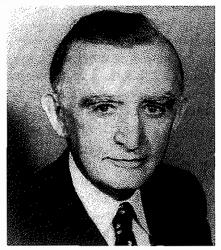
## III. The Sloan and Pick Plans

Because federal court rulings had favored lower basin interests, Missouri River basin consumptive-use advocates believed that legal reform was needed to protect the upstream area from the "creeping commerce clause." Furthermore, the House committees dealing with rivers and harbors and flood control had advanced development bills without adequately protecting perceived vital upper basin interests and without waiting for the Bureau of Reclamation's basin development plan to be submitted.

Uncertainty existed as to how much water would be available and for what purposes. In the Senate committees, the political balance was more favorable to upstream interests; senators from the western states traditionally voted as a bloc on water matters. The window of opportunity, referred to by Yellowstone Basin Association President H.W. Bunston, was open in May 1944 for the upper basin interests to secure protective legislation through an integrated Missouri basin development plan that included expanding the region's irrigation.<sup>1</sup>

Opportunity for the upstream interests materialized with the Bureau of Reclamation report and the opening of Senate hearings on the water development plans. Wyo-Senator ming Joseph O'Mahoney became the lead policy maker for western states' irrigation interests in water resources matters. He chaired hearings, made statements to other committees, and drafted the major upper basin protective proviso to the Flood Control Act of 1944 and the Omnibus Rivers and Harbors Act of 1945. On 5 May 1944, four days before the House passed the Army



Wyoming Senator, Joseph C. O'Mahoney.

Engineers' broad flood control plan for the Missouri, O'Mahoney presented to the Senate the Reclamation Bureau's plan for development of

Missouri basin surface water.

In the making since 1939, the bureau's report was prepared by the Region 6 office in Billings, Montana, as directed by William Glenn Sloan. Like Colonel Lewis A. Pick, Sloan served with the Corps of Engineers in World War I. Before the war he worked for the Department of Agriculture for six years directing drainage investigations in Wyoming and Montana. Sloan later worked as a private engineer at Boise, Idaho, and from 1932 to 1936 as special engineer for the Twin Falls Canal Company in Idaho. In 1936 he joined the Bureau of Reclamation.<sup>2</sup>

Sloan was selected to head the Missouri River basin studies when the 1939 Reclamation Project Act broadened the scope of examinations and surveys undertaken in connection with irrigation projects.3 Congress stipulated that the following was required before the Reclamation Bureau could submit estimates for any new projects: an engineering feasibility study; estimated cost of the proposed construction; and the portion of the costs that would be allocated to irrigation, hydroelectric power, municipal water supply, and other



William Glenn Sloan.

miscellaneous purposes likely to return revenues to the federal government. The 1939 law required that the Army Chief of Engineers had to be consulted if the bureau intended to make any allocation to flood control or navigation.

Sloan's assignment was to prepare a basin wide water resources development plan. All beneficial uses of water were to be considered in formulating a plan yielding "the greatest good to the greatest number of people" in the basin. Sloan's plan had been in the making approximately five years when the Army Engineers' plan for the Missouri River basin accelerated the bureau's work.<sup>4</sup>

The bureau's recommendations for basin water development were based on the premise that the watershed region's economy would be predominantly agricultural. Land-use adjustments were needed, the bureau's planners contended, "to stabilize the agriculture of the basin and mitigate the effects of future droughts." These adjustments could be best attained not through relocating farm families from marginal lands as the

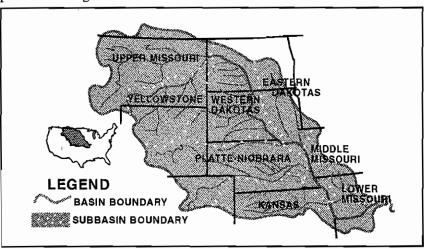
## **Projects Proposed By Sloan\***

	Approximate	Fathwated Tatal
Area & Project	Gross Storage Capacity (Acre Feet)	Estimated Total Construction Cost
Missouri River Main Stem —		
Fort Peck to Sloux City:		
Oahe	19,600,000	\$ 72,800,000
Ft. Randali	5,100,000	55,700,000
Big Bend	250,000	26,000,000
Smaller projects		239,121,000
Yellowstone River		
Watershed:		
27 reservoirs and		
irrigation distribution	4,285,200	177,601,000
Niobrara, Platte and Kansas Rivers:		
22 reservoirs and		
irrigation distribution	5,650,400	273,025,500
Upper Missouri River Basin:		
19 reservoirs and		
irrigation distribution	3,359,950	103,614,000
Minor Western Tributaries: 15 reservoirs and		
irrigation distribution	1,237,000	35,021,200
Lower Missouri River Basin:		
Pick plan approved		195,800,000
Fort Peck:		
Power system		10,963,000
Power transmission gri	d	68,000,000
Totals		\$1,257,645,700

<sup>\*</sup>Derived from U.S. Congress, Senate Document No. 191, 78th Cong., 2nd Sess., 1944.

Roosevelt administration had attempted in some areas, but by "progressive development of the irrigation potentialities of the area." The irrigation of tillable land would "add to [a] dry farming and grazing economy a dependable type of agriculture" and supplement the ranges in supporting a "larger, better, and less hazardous livestock industry." It would also have a "stabilizing effect" on support communities. Those who had left the basin because of World War II would be drawn back by "access to good land -- to well-watered land -- to agricultural units of sufficient capacity on which to rear families according to a decent standard of living."

Because of these potential social and economic benefits, the Bureau of Reclamation planners recommended greatly expanded federal irrigation development. At the time of the study, which relied heavily on 1939 census data, the basin had more than five million irrigated acres, of which about 12.5 percent was in federal projects. The bureau's planners proposed doubling this amount.



Subbasins Sloan Plan.

If the plan were realized, about one out of eight tillable acres in the basin would benefit from irrigation. This excluded the lower Missouri watershed east of the main-stem river below Sioux City and east of the 98th meridian, where irrigation was simply not practicable.

The report described irrigation enhancements in five subdivisions. In the Yellowstone basin, draining portions of Montana, Wyoming, and North Dakota, 27.2 percent of the tillable land was irrigated at the time of the study.<sup>6</sup> The bureau wanted to add another 12 percent (728 million acres), or about four out of every ten acres of tillable land in that sub-

basin. In the upper Missouri sub-basin above Fort Peck (most of which was in Montana), 9.25 percent of the tillable land was irrigated.<sup>7</sup> The bureau planners proposed adding 4.25 percent, or 460,900 acres, in that watershed to the tillable land irrigated. Both of these sub-basins were suitable mostly for livestock grazing, but the year-round management of herds and flocks of cattle and sheep required reserves of feed other than pasture. The bureau planners viewed every added acre of irrigated alfalfa, cultivated grass mixtures, and by-products from sugar beets as feed insurance for the livestock feeders and ranchers.

Within the basins of the minor western tributaries, comprising the watersheds of nine streams that discharged into the Missouri River in South Dakota from the west, only 1.1 percent of the tillable land was irrigated. The bureau planners proposed irrigating another 3 percent, or 213,000 acres. As in the Yellowstone and upper Missouri sub-basins, the watered land would grow forage crops to ensure reserve supplies of feed for livestock.

The bureau planners linked the three western tributaries (the Niobrara, Platte, and Kansas rivers) south of the minor western tributaries. The states affected were Kansas, Nebraska, Colorado, and Wyoming. The plains areas of these states had suffered periodic droughts that forced farmers off the land. In 1939 the three sub-basins had about 7.5 percent of their total tillable land irrigated. The planners proposed to add another 3.5 percent or 1,284,060 acres. Most of this would extend east of the well-established irrigation areas of the North and South Platte in the western portion of the vast Missouri basin.

In the designated Fort Peck-to-Sioux City subdivision of the Missouri basin, less than one-fifth of one percent of the identified tillable land was irrigated in 1939. This area, almost entirely in the Dakotas east of the Missouri River, contained nearly 21 million acres of tillable land. Dryland farmers suffered from the variability in crop yields. The land that could be developed by irrigation was limited, the bureau planners stated, "only by the quantity of water that can be spared from the Missouri River without undue interference with the needs of the inhabitants of the lower portion of the river basin." They proposed to irrigate 11 percent of the tillable acreage, or about 2.3 million acres, and thereby create "a new frontier in American irrigation history." Irrigation would be expanded toward the east and north from previous areas of development.

The huge Missouri-Souris unit was a part of this recommended subdivision development. From 1930 to 1940 the civil townships within the approximate boundaries of the proposed Missouri-Souris unit had lost 20.7 percent of their overall population and 28.7 percent of their rural

farm population. The planners recommended irrigating 1,403,400 acres in order to stabilize grain crop production and create a favorable ratio of rural farm and urban population.

Water from the Missouri River, stored in and regulated by the Fort Peck project, would be used for the irrigation. This plan depended on statutory reform, shifting the purpose of Fort Peck from navigation to irrigation. It required the sanction of thousands of private landowners whose farms would be irrigated, instead of public land that the Bureau of Reclamation traditionally developed. Water from the Missouri River would be diverted over long distances to create large blocks of irrigated areas. The visionary Missouri-Souris plan was a new frontier in irrigation history.

The Region 6 planners claimed that their plan would have significant effects on the watershed region in terms of additional homes and jobs and increased population on farms and in towns. The planners estimated that 53,000 farms of 90 acres each would be created through the irrigation of more than 4.7 million acres of new land. Assuming an average of four persons per farm, rural population would increase by 212,000. For every one person on an irrigated farm, two more persons would find employment in nearby communities, thus potentially increasing total population by 636,000 in the Missouri basin.<sup>11</sup>

The effects of construction would be far reaching. Approximately 250,000 man-years of employment would result from building the initial 30 projects alone. Aside from the workers employed on the various reclamation projects, many jobs would be created outside the basin in the factories producing the necessary equipment and materials and in their movement to the project areas under construction.<sup>12</sup>

Hence, the Bureau of Reclamation Region 6 planners envisioned agricultural and commercial growth in the basin that would redefine regional development. The project would provide permanent economic security to those who had suffered from drought. It would promote national expansion by developing the watershed region's most vital assets -- its land and water. Most important, it would enhance the welfare of the individual citizen.

Glenn Sloan transmitted the plan to the bureau's offices in Denver, where it was reviewed by a five-person board selected by the Commissioner of Reclamation. The board was chaired by E.B. Debler, director of the Project Planning Branch, who had been coordinating basin water development plans with the Missouri River Division Army Engineers. After meeting from 10 to 13 April 1944, the board recommended that the plan "be approved subject to such modifications and changes as may be

indicated, from time to time, as the plan is effectuated."13

The review board thought the Region 6 plan was technically and economically sound. It noted, however, that "The greatest benefits will be attained through coordination of the advice and work of all interested federal, state, and local agencies." As to conflicts related to water control and use in the vast Missouri basin, the board stated that "preference should be given to those which make the greatest contribution to the well-being of the people and to the areas of greatest need." The board added that "the use of water for domestic, agricultural, and industrial purposes should have preference." The review board concluded that the Region 6 plan would meet these primary objectives.

Albert M. Day, Acting Director, U.S. Fish and Wildlife Service, Department of the Interior, could make only "a casual examination of the report" before the deadline for its delivery to the Bureau of the Budget. He thought it was "well prepared" and gave "fair consideration to diverse interests." Day took exception to the review board's statement that the use of water for domestic, agricultural, and industrial purposes should have preference. In a precursory statement about future basin conflict, Day wrote that "we could not subscribe to the thought that any particular plot or block of agricultural land . . . should have prior use of water over an important muskrat marsh or other wildlife project. Likewise, every industrial use might not have so much value from the national standpoint as the wildlife benefits." 14

Other Interior Department officials also took issue with parts of the Bureau of Reclamation report and predicted future areas of conflict. William Zimmerman, Jr., Assistant Commissioner, Office of Indian Affairs, wrote to Commissioner Bashore on 26 April that he agreed with most of the recommendations in the report. However, he disagreed with the board's suggestion that all authorized works "be constructed, operated, and maintained by the Bureau of Reclamation under the direction of the Secretary of the Interior wherever the dominant function of such works is other than navigation and flood control." <sup>15</sup>

The Office of Indian Affairs exercised the same functions on Indian lands as did the Bureau of Reclamation on non-Indian property, and Indian Service lands and irrigation projects existed throughout the Missouri basin. Many of the features of the proposed plan were wholly or partially on Indian lands, and thus affected Indian water rights and existing Indian irrigation projects.

Zimmerman wanted the bureau to revise its recommendation so that his agency could help plan, construct, and operate those irrigation and power features affecting Indian interests. He cited the need to protect Indian interests in compliance with the Winters decision and the terms of the Leavitt act. Not only had the court recognized Indian "reserved" water rights in the landmark case of *Winters v. United States*, but federal policy was to reduce tribal dependency on the federal government. According to the Winters doctrine, which related to the Milk River on the Fort Belknap Reservation in Montana, water was reserved for the benefit of the reservations. Only Zimmermann addressed this important issue, which had been ignored in the deliberations over the Missouri River development plans.

The report was sent for review to an inter-agency river basin committee. The Chief of Engineers, a member of the committee, responded on 25 April that "the upstream tributary reservoirs" proposed in the report would fit into the Army Engineers' "expanded comprehensive plan for flood control and other purposes, provided main-stem storage is not substantially reduced." He believed that further studies prior to construction could resolve differences in most of the sub-basins. With regard to any proposed main-stem reservoirs, Reybold stressed the "essential" need that they "be built, operated, and maintained by the Corps of Engineers." <sup>16</sup>

Reybold questioned the feasibility of the bureau's proposed huge Missouri-Souris project. He agreed that "the best overall use" of the reservoirs in the Missouri River basin was to divert water out of the basin into the Dakotas for "urgently needed . . . domestic use and for other purposes." He objected, however, to "developing a large-scale irrigation project outside" the basin that would diminish its natural water supply "until the existing and foreseeable needs for the conservation and use of water within" the basin had been satisfied. Reybold advised further study and consideration. The Chief of Engineers raised other concerns about the Missouri River development program. He said that the costs allocated to flood control and navigation were "very large compared to costs allocated to irrigation." General Reybold noted that the benefits of irrigation were "represented as several times the combined benefits to flood control and navigation." The methods for reporting benefits and the manner of accounting for basin receipts were to be ongoing issues.

Reybold sent a copy of the bureau report, marked "confidential," to the Department of Agriculture. The response from the department's Land Use Coordinator, E.W. Wiecking, was brief. He informed Bashore that his department was not responsible for the "design or construction of major engineering works for irrigation, flood control, power, and other purposes." While the Department of Agriculture recognized the potential basinwide effects of water resources development, it offered no more

than its cooperation.17

In his transmittal letter accompanying the Region 6 report to Secretary of the Interior Harold L. Ickes, Commissioner Bashore focused on the comments of the Chief of Engineers. Bashore expressed his agreement with Reybold that the two agencies coordinate their plans. The Reclamation commissioner noted a major difference in the big dams the two agencies had proposed for the main-stem river. The Oahe Dam, as proposed by the bureau, would provide a reservoir with a capacity of 19.6 million acre-feet; the Garrison Dam proposed by the Army Engineers would provide a reservoir of 17 million acre-feet. Bashore said that one of these dams "would constitute the initial flood control facility." He favored the Oahe project for both flood control and irrigation. Of course, realization of this project would require both congressional legislation releasing the Fort Peck project from its navigation purposes and acceptance of most of the other provisions contained in the bureau's Region 6 report.<sup>18</sup>

Bashore recommended the approval and authorization of the construction, cost-share, operation, and maintenance of the projects in accordance with the Region 6 report. He approved the findings, comments, and recommendations made in the review board's report. He cited the need for development of the Missouri River basin "as conclusively shown in the report." Secretary Ickes concurred with the findings and endorsed the program.<sup>19</sup>

Bureau of the Budget Director Harold D. Smith withheld substantive comment on the report and recommendations, but endorsed the Secretary of the Interior's sending the report to the congressional committees for their consideration. Smith's letter was dated 4 May 1944, one day before Senator O'Mahoney introduced the bureau's report for basin development.

As S. 1915, the Bureau of Reclamation plan was referred on 12 May to the Senate Committee on Irrigation and Reclamation. Before action was taken there, however, the Senate Commerce Committee considered the plan with the rivers and harbors and flood control bills (H.R. 3961 and H.R. 4485). Unlike the House, which had separate committees for each of those measures, the Senate had a single committee to consider both rivers and harbors and flood control legislation. The Commerce Committee, under the chairmanship of Senator Josiah W. Bailey of North Carolina, dealt separately with House rivers and harbors and flood control bills in subcommittee. Both subcommittees were chaired in 1944 by Louisiana Senator John Overton.

Overton first conducted hearings on the nine-foot navigation channel

bill (H.R. 3961). Initially, those speaking before the subcommittee repeated positions expressed in the House hearings. Overton resisted several attempts by consumptive-use advocates to link the navigation provision to the Army Engineers' Missouri River plan (H.D. 475) in the flood control bill (H.R. 4485) and to subordinate navigation to irrigation.

The fragmented subcommittee approach to Missouri River legislation was explored in a revealing colloquy between Senator Overton and Clifford H. Stone, director of the Colorado Water Conservation Board.<sup>21</sup> Stone espoused the integrated network of projects as proposed, but called for legal safeguards related to irrigation. His "judgment" was that the subcommittee was not only considering the nine-foot navigation channel, but the broader plans for river development contained in H.D. 475 and S. 191.

Senator Overton. This subcommittee has no jurisdiction over any project unless it deals with navigation.

Stone. That is right. But it would seem that it does have power to correlate a navigation project with other developments in a basin or provide the procedures to do it.

Overton. None at all, and it cannot go into those other questions that you raise with respect to the authorization of the project. . . . It is written into the law. It is the declared policy of the United States. Now, what is wrong with that, and how can we depart from this statutory requirement as to its authority?

Stone thought that Congress, when dealing with an entire river basin and a framework for wide-ranging future development, should include in "that framework protective measures for various uses of water." Stone said that this policy was especially critical when considering two integrated bills and when the measures involved "conflict between state water laws and federal jurisdiction." Authorizing the navigation channel without protective measures for a fully coordinated plan would, according to Stone, endanger the integration of all the water uses. Stone contended that if Congress had the power under the commerce clause to authorize a project in aid of navigation, it also had the power to insert limitations on the use of water for navigation purposes.

Senator Edward Vivian Robertson of Wyoming, the only upper basin state member of the Commerce Committee, added his views and support for Stone's position. He said he had been made aware throughout the hearings that the two bills were "very much mixed up one with the other." He viewed irrigation as the central issue and pointed out that the Missouri

River project was "a multiple-purpose project."22

The subcommittee chairman rebutted Robertson's position:

Overton. With all due deference, I beg to differ with you. It has nothing to do with irrigation or the generation of power.

Robertson. But the river on which it is constructed is a navigable river.

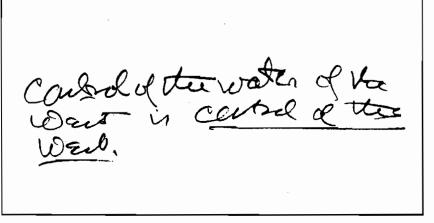
Overton. That is a different proposition. The project itself has to do solely with navigation.

Stone. But has it not been demonstrated that the authorization of the project may interfere with irrigation uses, and that in the flood control bill in the Pick plan there is a framework for all of these uses, including irrigation?

Overton. Judge, please do not go into the flood control bill. I have troubles enough. I know that the Missouri River basin has an interrelated system of projects, some for irrigation, some for navigation, and some for flood control, multiple-purpose projects, but so far as this bill is concerned we are considering only one project, and that is a navigation channel on the lower Missouri River.

At that point in the hearings on the navigation channel provision, Overton was unwilling to consider unified, comprehensive planning and programming issues for Missouri River water.

Senator O'Mahoney deplored the subcommittee's fragmented ap-



proach. He declared that the time had come to legislate "by river basins, not by projects." Yet he vowed to continue seeking protective legislation and specified that if water began flowing in their area, then the people west of the 98th meridian had first rights to its use. O'Mahoney and his supporters insisted on isolating the scarce water area of the upper basin for special legislative consideration.

O'Mahoney proposed amendments to the Missouri River legislation. The original undated draft in the senator's files and a draft dated 17 June 1944, with additional proposed amendments to the flood control bill, contained a preamble regarding purpose. Paragraph (a) stipulated state participation in proposed Corps of Engineers projects; paragraph (b) addressed procedures for dealing with written objections to project authorizations; paragraph (c) established a preference for upstream consumptive uses of water over downstream uses; and paragraph (d) imposed on the Bureau of Reclamation similar state participatory procedures as those imposed on the Corps of Engineers, including the states' rights to veto measures prior to congressional action.<sup>24</sup>

Overton submitted to Senators O'Mahoney, Robertson, and Eugene Donald Millikin of Colorado a suggested counter amendment to H.R. 3961. Overton deleted provisions of the bill relating to the Missouri River and substitute the following:<sup>25</sup>

Missouri River. All dams and reservoirs needed on the main stem of the Missouri River above Fort Peck, or on the tributaries of the Missouri River, for the beneficial consumptive use of water for domestic, irrigation, mining, or industrial purposes, shall be operated primarily for such purposes. . . . All dams and reservoirs herein or hereafter authorized on the main stem of the river below Fort Peck shall be operated primarily in the interest of navigation and flood control. . . . Upon completion of the Garrison Dam, the Fort Peck Reservoir shall be operated primarily for the needs of irrigation. The existing project between Sioux City, Iowa, and the mouth of the Missouri River is hereby modified to include such additional ... [works] as the Chief of Engineers may deem necessary to provide such navigable depths in excess of six feet as may be practicable with the flows which may from time to time be available, without impairment of the primary purposes of the use of waters in the tributaries of the Missouri River and in the main stem thereof above Fort Peck, and out of Fort Peck after the completion of the Garrison Dam, for domestic, irrigation, and any beneficial consumptive use.

Overton considered this proposed amendment "generous to the western area, fair, and practical," whereas O'Mahoney's was impractical and unacceptable. If his own amendment proved agreeable to the sponsors of the O'Mahoney amendments, Overton would "request a meeting of the Commerce Committee to authorize me to present it on the floor." <sup>26</sup>

In the meantime, Overton's subcommittee on 25 May had reported favorably on the channel-improvement project without reference to the O'Mahoney amendments. Robertson was the sole dissenter. In a minority report, he pressed for stronger protection for upper basin consumptive uses than was included in the House version of the bill. Reflecting the western states' viewpoint, Robertson stated his concern that the federal government under the expanded navigation channel provision would be asserting rights to water in the upper basin states for downstream purposes without having established those rights under state laws.<sup>27</sup>

Even the federal reclamation program would be threatened without protection such as that provided in the O'Mahoney amendment, according to Robertson. In his minority statement, he explained that future federal reclamation projects could not be authorized if water supplies were subject to preferential use to maintain navigable capacities. The law required that all water projects had to pass feasibility tests, which meant that irrigation projects were subject to assurance of a sufficient water supply. Robertson pointed out that "The result of such a situation where improvements authorized by Congress impose a first call on water for navigation would be to relegate for all time to come large, irrigable areas to the status of desert wastes."<sup>28</sup>

Hearings on H.R. 4485, the flood control bill embodying H.D. 475 for Missouri River development (as introduced by MRD Division Engineer Colonel Lewis A. Pick), were held in June by a second subcommittee of the Senate Commerce Committee. John Overton again acted as chairman. O'Mahoney led western senators in again pressing for amendments to the navigation powers that would protect consumptive uses. On behalf of Senators O'Mahoney, Robertson, and Edwin Carl Johnson of Colorado, Senator Millikin on 9 June proffered amendments similar to the earlier ones.<sup>29</sup>

Consumptive-use advocates continued to emphasize that without the O'Mahoney-Millikin amendments, authorization of H.D. 475 would subordinate the plan for irrigation development to flood control and navigation. They wanted the reverse because they saw threats in several sections of the flood control bill. For example, section 3 referred to "dam and

reservoir areas" and appeared to authorize the Chief of Engineers to construct and operate reclamation facilities because of the "conservation" capacities of flood control reservoirs. Section 4 provided that the Secretary of War (who would delegate to the Chief of Engineers) was authorized to sell to states, municipalities, and private concerns or individuals "surplus water" from any reservoir under War Department control. Section 5 specified that the Army Engineers should regulate the use of storage available for flood control or navigation at all reservoirs constructed wholly or in part with federal funds by any agency of the government. And section 6 provided that whenever in the opinion of the Secretary of War and the Chief of Engineers, any dam and reservoir operated by the Corps could be used for reclamation of arid lands, the Secretary of the Interior should prescribe regulations for the available storage.<sup>30</sup>

The reclamation advocates had pushed for the multiple-use developments provided for in the bill. But if the Army Engineers, acting as agents of the federal government, were authorized to construct conservation facilities, then consumptive-use advocates wanted the states to have legal protection in the control of water. Section 8 and other provisions of the 1902 Reclamation Act afforded a degree of protection to the states where projects were constructed and operated by the Bureau of Reclamation.

Irrigation interests interpreted section 4 of H.R. 4485 as a radical departure from the adopted reclamation law. Under the 1902 act and its amendments, the Secretary of the Interior was directed to acquire water for reclamation projects in conformity with state laws. As the upper basin interests interpreted H.R. 4485, Congress was about to reverse this policy in the case of multiple-purpose projects constructed by the Army Engineers. The result would be a new policy whereby the federal government would sell to the states the benefits of water captured from streams flowing through the states. The threat in section 6 was that it applied in those cases where reclamation was deemed essential to agricultural development and where water for federal reclamation projects was appropriated and distributed in conformance with state laws. The upper basin interests wanted legislation that would subject the Corps of Engineers to the established principles of reclamation law.

Senator O'Mahoney's 17 June draft of amendments related to sections 4 and 6 of the flood control bill. As amended, section 4 would read as follows:<sup>31</sup>

That the Secretary of War is authorized to sell to states, municipalities, private concerns, or individuals, at such prices and on such terms as he may deem reasonable, for domestic and industrial uses surplus water that may be available at any reservoir under the control of the War Department, but only to the extent that the right to the use of waters for those purposes has been established by proceeding in conformity with whatever state laws are applicable at the place of use.

O'Mahoney wanted to strike out all of section 6 and substitute the following:

Hereafter, whenever the Secretary of War determines, upon recommendation of the Secretary of the Interior, that any dam and reservoir project operated under the direction of the Secretary of War can be consistently utilized for irrigation purposes, the Secretary of the Interior is authorized to construct, operate, and maintain, under the provisions of the Federal Reclamation laws (Act of June 17, 1902, 32 Stat. 388, and acts amendatory thereof or supplementary thereto), or under the provisions of other applicable laws, such additional works in connection therewith as he may deem necessary for irrigation purposes. Such irrigation works may be undertaken only after a report and findings thereon have been made by the Secretary of the Interior as provided in said federal reclamation laws or other applicable laws; and, within the limits of the water users' repayment ability, such report may be predicated on the allocation to irrigation of an appropriate portion of the cost of structures and facilities used for irrigation and other purposes. Dams and reservoirs operated under the direction of the Secretary of War may be utilized hereafter for irrigation purposes only in conformity with the provisions of this section, but the foregoing requirement shall not prejudice lawful uses now existing, nor shall this section apply to any dam or reservoir heretofore constructed, in whole or in part, which provides conservation storage of water for irrigation purposes.

This language and that in the original O'Mahoney amendment, especially in subparagraph (1)(c), were too radical a departure for Senator Overton. He was concerned with the erosion of cooperation. Overton could relate the latest position to that of subset (c) in the 17 June version.

As Senator O'Mahoney had noted, the "president has indicated his position":

The use of navigation, in connection with the operation and maintenance of such works here in or hereafter authorized for construction, of waters arising west of the ninety-seventh meridian shall be subordinate to and shall not adversely affect at any time the beneficial consumptive use, west of the ninety-seventh meridian, of such waters for domestic, irrigation, mining, or industrial purposes.

President Roosevelt did seem to endorse the O'Mahoney position. In a letter to Overton dated 13 June, Roosevelt referred to the Missouri River legislation. He thought that

> ... when considering that part of the country in which the laws of nature inexorably accord to the beneficial consumptive use of water a primary role, we must bow to those laws in our plans and legislation to the fullest extent compatible with full comprehensive development of our streams for the good of the Nation as a whole.

Roosevelt noted that the suggested amendments had "merit in firmly establishing the primary importance of the beneficial consumptive use of water without requiring any cession of federal jurisdiction under the commerce clause of the Constitution." He recognized the "immense complexity of the problem," but hoped that Overton and his colleagues could draft acceptable legislation.<sup>32</sup>

Overton's subcommittee reported on the flood control bill on 22 June. It explained why the O'Mahoney-Millikin amendments were not acceptable. The subcommittee questioned the constitutionality of the consumptive-use advocates' amendments, provided parallel measures, and proposed changes in water-use policy beyond the committee's jurisdiction. Overton's subcommittee affirmed the House version with the Case provision that no new water rights would be vested in the flood control bill.<sup>33</sup>

The Senate calendar was crowded with wartime matters. Floor consideration of Missouri River legislation would have to wait until Congress returned from recess. In the interim, despite focus on the war and on fall elections, advocates in Washington and in the Missouri basin sustained interest in the pending bills.

The President continued to exert pressure on Senator Overton. On 7 August he again wrote to the senator regarding the Missouri River legislation. Roosevelt said that he still hoped a way could be found to

settle "differences between the proponents of irrigation and of navigation so that the needed overall development of the basin can proceed expeditiously." He made no substantive suggestions to Overton, other than to state his conviction that the amendment was

... designed to assure that the respective states have opportunity to have their views formally recorded in reports on proposed projects of interest to them. . . . This amendment seems to me to be no less constitutional than other limitations written by the Congress from time to time on the extent and manner of the execution of powers vested in the federal government by the commerce clause of the Constitution.<sup>34</sup>

The Missouri River States Committee wanted more clarification of substantive rights than the President provided. The basin governors met in Omaha on 5 and 6 August to discuss the Missouri basin water development issues. A first order of business was to address the MRSC's engineering subcommittee report on the quantity of water that might be available for the various purposes proposed.

The governors were told of the difficulty in getting objective information on the adequacy of water flows in the basin's streams. The engineering subcommittee reported that "While there are short records at various points prior to 1929, no general program of stream gaging along the main river below the mouth of the Yellowstone was started until that year." The hydrologic data base was scant.

The governors' subcommittee found a discrepancy in how the federal agencies computed the Missouri's flow at Yankton, South Dakota. The Corps of Engineers computed average annual runoff at there as 23,050,000 acre-feet, which was equivalent to 31,800 cfs for the period 1898 to 1943. The Bureau of Reclamation, however, used only a 12-year period (1931 to 1942) to compute an average annual runoff at Yankton of 14,935,000 acre-feet or 20,600 cfs. For this period, the Corps showed an average of 15,536,000 acre-feet per year, equivalent to 21,440 cfs. The latter period included the drought period of the 1930s or 11 successive years of unprecedented low water supply at Sioux City, just below Yankton, (and the considered head of navigation under the proposed development plans), and was computed at 22,473,000 acre-feet per year. The subcommittee concluded with the belief that reservoir storage in the basin could provide "reasonable regulation between wet and dry periods." 35

The MRSC engineering subcommittee recommended procedural policies the federal agencies might follow: If . . . under certain circumstances there might be possible conflict in use of water, . . . both agencies [must] recognize that their plans constitute a broad framework, and that details are to be worked out during the years of the development period through the coordinated and cooperative efforts of federal [agencies], state agencies and local agencies.

The MRSC engineers said that the Bureau of Reclamation could not determine the acres to be irrigated, nor what consumptive use would develop. The Corps of Engineers could not determine the amount of water required to maintain a 9-foot navigation channel 300 feet wide. The subcommittee concluded that "quantities of water required for the various uses in the basin" would have to be determined at a later date. Although the engineering subcommittee was unable to determine water needs for purposes proposed in the federal agencies' plans, the basinstate governors endorsed the project plans of the Bureau of Reclamation and the Corps of Engineers. The MRSC adopted a resolution petitioning the President and Congress to direct the federal agencies to coordinate their plans based on the proposed legislation. The governors' committee believed a coordinated plan would prompt Congress to expedite authorization of the Missouri River basin development program "in its entirety." Seven of eight states' representatives met in executive session (with Missouri abstaining), then voted for a proviso in the resolution that "nothing done in the interests of flood control or navigation shall adversely affect the use of water from irrigation west of the ninety-seventh meridian."36

The MRSC meeting at Omaha had addressed two issues critical to consumptive-use advocates. Clifford Stone told Wyoming State Engineer Loran C. Bishop that the MRSC report on the availability of water for proposed developments in the Missouri basin and the congressional hearings failed to allay concerns in the upper basin about available water for navigation and for present and future irrigation uses west of the 97th meridian. The record was just too full of conflicting testimony on the subject. Stone reminded Bishop that because of doubt about adequate water supply to carry out the Corps plans and in the absence of the protection of the O'Mahoney amendment, the Bureau of Reclamation could not deem the irrigation project feasible as required by reclamation laws.<sup>37</sup>

Stone urged irrigation interests to aggressively support the O'Mahoney amendment to secure irrigation development for the Missouri and all rivers west of the 97th meridian:

If there is an adequate water supply for all purposes, then the O'Mahoney amendment injures no one. If it should turn out that those who do not believe there is sufficient water for all purposes are right, then our future irrigation development will be adequately protected.

In Stone's opinion, the O'Mahoney amendment was compatible with the legislation being considered. It would protect existing water rights and future developments for consumptive purposes in the upper basin, and guarantee rights more far reaching than the in-the-channel allocation purposes in the lower reaches of the river.

Stone transmitted his views to O'Mahoney. The senator responded promptly, citing the importance of his amendment being written into any legislation for Missouri River development.<sup>38</sup> These two advocates began preparing for a meeting of various water organizations for the purpose of bringing together water experts from 29 states that had expressed a desire to forge amendments to the rivers and harbors and flood control bills pending before the Senate.

The delegates to the Water Conservation Conference had yet to convene in Chicago when Montana Senator James Edward Murray laid a Missouri Valley Authority (MVA) bill on the Senate table. The bill, dated 18 August 1944, would establish a regional administrative authority similar to that formed earlier in the Tennessee River basin. Murray said his bill was intended to implement "unified water control and resources development" in the Missouri basin.<sup>39</sup> (Note: The MVA legislative history is detailed in the following chapter.)

Iowa Senator Guy Mark Gillette introduced a second MVA bill five days after Murray's action.<sup>40</sup> It too was patterned on the Tennessee Valley Authority (TVA) act. The bill provided more local control and empowered the authority to issue bonds. Both bills were referred to the Senate Committee on Agriculture and Forestry, which had passed on the TVA bills. In the House, they were referred to the Rivers and Harbors Committee.

The MVA bills and one from Mississippi Representative John Elliot Rankin encompassing the nation's major river systems may have further stimulated delegates to the Water Conservation Conference. The National Reclamation Association's *Bulletin* of 23 August opposed a regional administrative authority. The association's secretary-manager, F.O. Hagie, stated that the "regional authority procedure for stream basin development has never been as dead as it is today." He believed August 1944 was the time "for bringing existing or competing agencies with the know-how together and requiring them to work in double harness for the

benefit of the Nation." While the agenda for the Chicago meeting did not touch on the regional authority bill, it included much discussion of "the so-called O'Mahoney amendments" to the Omnibus Rivers and Harbors bill and the Omnibus Flood Control bill.<sup>41</sup>

The principal objectives of the Chicago Water Conservation Conference were to analyze and study the proposed O'Mahoney-Millikin amendments and then draft suggested changes. The amendments applied to nationwide legislative policy and attracted various interests who wanted to assure nonfederal participation in resources development, to preserve the integrity of state water laws, and to refine amendments to H.R. 3961 and H.R. 4485 and lobby for their adoption. Along with Millikin and O'Mahoney, Representative Francis H. Case of South Dakota and Senator Hugh Alfred Butler of Nebraska took part in the conference. Senator Clifford Stone chaired the resolutions drafting committee.

The amendments were redrafted and endorsed in a resolution to all congressmen and governors.<sup>42</sup> The second draft retained the original principles that Congress must recognize the interests and rights of the states in water use and in determining the development of the watersheds within their borders. Provisos in the redrafted amendments were intended to enforce the states' position relative to water rights, to placate Congress, and to make the demands of those in scarce water areas more acceptable.

The preamble in Senator O'Mahoney's 17 June draft was unchanged in the 8 September Chicago conference draft. It charged Congress with recognizing the "interests and rights of the states in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control." O'Mahoney's amendment would limit navigation works to those providing "a substantial benefit to navigation" and that could be "operated consistently with appropriate and economic uses of the waters of such rivers by other uses."

O'Mahoney's controversial preference provision in subparagraph (1)(c) was changed by the Chicago conferees. They deleted the word "subordinate" and redrafted the critical phrases to read as follows:

The use for navigation, in connection with the operation and maintenance of such works herein or hereafter authorized for construction, of waters arising in states lying wholly or partly west of the 98th meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in states lying wholly or partly west of the 98th meridian, of such waters for

domestic, municipal, stock-water, irrigation, mining, or industrial purposes.

The delegates amended section 4 of the flood control bill, which had been passed by the House and referred to the Senate out of Overton's Commerce Committee subcommittee. Rather than authorizing the Secretary of War/Corps of Engineers to "sell" available "surplus water," the redrafted amendment stated that the Corps could contract with nonfederal public entities for water storage for any beneficial uses. The Chicago conferees added a restriction "that the right to the use of water for such purposes shall have been established by . . . state laws; and . . . no such water storage shall be in conflict with or adversely affect then existing lawful uses of water."

The conferees directed their attention to the controversial section 6 of the flood control bill. They deleted it in accordance with the O'Mahoney draft suggestion of 17 June and recommended to Congress the amendment as stated in O'Mahoney's draft. The consumptive-use advocates at Chicago agreed that the beneficiaries of the conservation should ultimately pay for the construction, operation, and maintenance costs for that part of the works devoted to conservation. (This was in accordance with existing law.) They believed that consumptive users should be exempt from payment for the right to use water. This objection was intended to be resolved in the amended section 6.

O'Mahoney's handwritten notes attached to the corrected copy of these redrafted amendments from the Chicago conference anticipated further conflicts before an acceptable Missouri River development plan could be formulated. He noted that the revised section 8, which had been section 6 in the flood control bill, would not be "wholly satisfactory" to the Department of the Interior or Bureau of Reclamation. The revised section 6, which had been section 4 in the original bill, authorizing the Corps of Engineers to "contract for water storage for any beneficial uses" also would be "objectionable" to the bureau. These were major issues to be addressed on the floor of the Senate.

Before the floor debate, several concerned interests took action to influence the legislators. On 1 September, Representative Case of South Dakota on the House floor cited the MRSC resolution requesting Congress and the President to call for a written coordination of reports of the Chief of Engineers and the Bureau of Reclamation. Case urged positive action on the states' resolution.<sup>43</sup>

President Roosevelt concurred, although he was pursuing objectives other than those of the South Dakota congressman or the governors. Roosevelt favored the postwar projects, but he also was pressing for

greater control over river basin development. He attached the MRSC resolution to a 21 September message to Congress and inferred that it advocated creating a Missouri Valley Authority. The resolution in fact made no reference to a regional administrative authority. Instead, the governors urged that the basin's water resources be developed by the Corps and the Bureau of Reclamation based on congressional approval of a coordinated plan.<sup>44</sup>

Senator O'Mahoney understood far better than did President Roosevelt the concerns regarding Missouri basin water resources development. The week after Roosevelt's MVA message, O'Mahoney opened hearings as chairman of a subcommittee of the Committee on Irrigation and Reclamation. The Bureau of Reclamation's plan for Missouri basin development, or S. 1915, was the subject of discussion. The hearings were dominated by consumptive-use advocates representing mostly federal and state entities.

Secretary of the Interior Harold L. Ickes urged that the plan be adopted without reservations. He also endorsed the O'Mahoney-Millikin amendment. While Ickes aggressively promoted the proposed Bureau of Reclamation program, his involvement did little to further coordination.<sup>46</sup>

Coordination was in fact the major concern of a number of senators who questioned the bureau officials appearing before the subcommittee. For example, South Dakota Senator John Chandler (Chan) Gurney reminded Bureau of Reclamation planner William Sloan that much time had passed since the two agencies had drafted plans: "Why you couldn't get together before this is beyond me." Sloan replied that his agency had shown "no lack of willingness." Then O'Mahoney asked Sloan if any obstacle existed to correlation of the two plans and congressional authorization. Sloan said this "could be done very easily" with "mere instruction" from Congress.

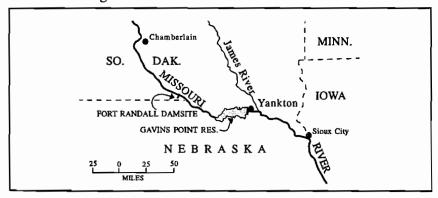
Soon after the Senate Irrigation and Reclamation subcommittee hearings, the two agencies coordinated their plans. This followed instruction from the agency heads and encouragement from the Missouri River States Committee. On 16 and 17 October, the bureau's William Sloan and John R. Riter met in Omaha with MRD Division Engineer Brigadier General Roscoe C. Crawford and Gail A. Hathaway, Senior Engineer, Office of the Chief of Engineers. The conferees reconciled engineering differences in the two agencies' proposals for Missouri River basin development and jointly endorsed a combined plan.<sup>48</sup>

According to the testimony of George S. Knapp, Chief Engineer, Kansas Division of Water Resources, and secretary of the MRSC, the basin states' governors and other states' representatives participated actively in the coordination meeting. He told Senator Overton during congressional hearings in September 1945 that the MRSC had "very carefully questioned" the federal agency representatives as to "why they could not get together and they showed evidence of an earnest endeavor to cooperate with the states . . . to coordinate those programs." The Corps and bureau thus developed the framework for joining the plans with the participation of the basin state delegates at the Omaha meeting.

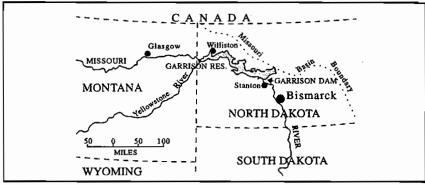
The two original plans submitted to Congress by the Corps and the bureau differed in purpose and details. They did agree on project concept to store and control the river's flows for multiple beneficial uses. Both proposed a series of big dams and large reservoirs on the main stem above Sioux City. The difference in total reservoir storage capacity of the two plans was less than five million acre-feet. Both would develop hydropower wherever feasible, after primary demands (for irrigation, navigation, and flood control) were met.

The conferees in Omaha reconciled the two plans by allocating jurisdiction of the proposed development.<sup>50</sup> The Corps would determine main-stem and tributary reservoir capacities for flood control and navigation; the bureau would determine these capacities for irrigation purposes.

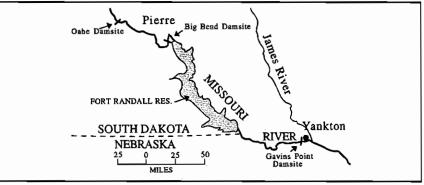
Discussions were aided by working with the bureau's subdivisional areas. No conflict existed in the upper Missouri, lower Missouri, and minor western tributaries. The Yellowstone basin, a major western tributary, was to be developed according to the bureau's plan. The Niobrara, Platte, and Kansas river systems required three adjustments. The conferees made major compromises in the original proposals for the main-stem area from Fort Peck to Sioux City. Dams in North and South Dakota would impound 72 percent of the new water storage in the entire basin. The conferees agreed on five dams:



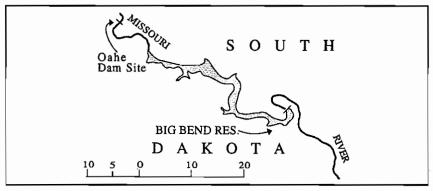
1. **Gavins Point**, recommended by the Corps, with a 200,000-acrefoot reservoir extending from Yankton to Running Water, South Dakota.



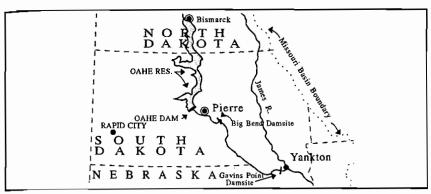
2. **Garrison**, recommended in the original Corps plan, located just above Stanton, North Dakota, and impounding a 17-million-acre-foot reservoir extending beyond Williston almost to the Montana line.



3. **Fort Randall**, smaller than the Corps originally planned, located at the South Dakota-Nebraska boundary and backing water to above Chamberlain, with five million acre-feet of storage capacity.



4. **Big Bend**, proposed in the original Bureau of Reclamation plan as a 250,000-acre-foot reservoir below Pierre, South Dakota.



5. **Oahe**, proposed by both agencies and the largest of the main-stem reservoirs in storing 19.5 million acre-feet of water, just above Pierre and extending to Bismarck, North Dakota.

These five projects, complemented by Fort Peck with about 20 million acre-feet of storage, were expected to provide 68 million acre-feet on the Missouri River for flood control and navigation releases, to supply irrigation and hydropower, and to meet municipal and industrial needs in the main river valley and James River basin.

The Corps of Engineers had no plans for the Missouri and its tributaries above Fort Peck. The Bureau of Reclamation originally proposed 19 reservoirs in Montana with a combined storage capacity of 4,237,000 acre-feet. These projects would irrigate 460,900 additional acres and provide supplemental water for 208,700 acres. One of the dams was to have a hydroelectric power plant.

The Corps made no recommendations for projects on the small streams flowing eastward through the western Dakotas. The bureau proposed 15 reservoirs with a total storage capacity of 1,237,000 acre-feet. About 213,000 acres could be irrigated. Two dams included power developments. The conferees recommended developing these western tributary projects.

In the Yellowstone basin, two large reservoirs were eliminated from original Corps plans. The joint report proposed 27 bureau projects in Montana and Wyoming. Storage capacity would exceed four million acre-feet. Power plants were included with eight dams. Irrigation would be provided for 509,560 additional acres and supplemental water for 204,500 acres.

The conferees amended the original plan for the Niobrara, Platte, and Kansas river systems. Congress previously had authorized projects on the streams and the Corps of plan called for five more reservoirs. The bureau had originally proposed 22. The joint recommendation was for 25 dams.

Water would be made available to irrigate 1,284,000 additional acres. Power would be developed at two of the dams. The projects would provide flood abatement and silt storage.

Developments in the lower Missouri basin, presented only in the original Corps plan, were retained in the joint report. Six flood control dams on tributaries in Missouri, Kansas City metropolitan area flood protection works, and a levee system below Sioux City had been authorized previously. The Corps plan recommended expansion of these projects complementing the main-stem dams.

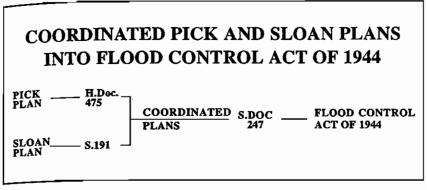
These agreements reflected the agencies' roles as mandated in national legislation. The Corps' mission for flood damage abatement throughout the nation, especially in the urban areas, and the Bureau of Reclamation's role of providing irrigation water in areas west of the 98th meridian both were addressed. The joint report specified the agencies' dominant interests in the Missouri basin.

The two agencies resolved differences in their original proposals with minor concessions, and without loss of principle or mission objectives. Client groups wanted the agencies to settle their differences so that the groups could benefit from federal programs and avoid postwar delays. The joint report would aid agency advocates in Congress in securing authorizations.

Specifically, the Omaha discussions resulted in an agreement among engineers. The accord did not purport to deal with the policy issues that arose as project development proceeded. It did not even include some important public-works engineering projects such as the nine-foot-deep navigation channel and the diversion from the Colorado River of over 300,00 acre-feet of water into the Missouri basin under the Bureau of Reclamation's Big Thompson project. The conferees had not considered interdependence of hydropower, irrigation, navigation, and municipal and industrial water supply; nor the effects on water and related land and fish and wildlife. The report said nothing about the Indians' sovereignty, their vested water rights, or the important issue of water allocations to the states.

As manager of the legislation in the Senate, Overton could choose which bill to bring up and then guide the flood control debate. He chose the flood control bill and on 21 November the deliberations began. O'Mahoney introduced into the record the Army Engineers and Bureau of Reclamation agreement for Missouri River development and it was printed as Senate Document 247, supplemental to the original agency plans contained in S. 191 and H.D. 475.<sup>51</sup>

On 27 November, the President transmitted his agreement to Con-



Evolution of two plans into one.

gress.<sup>52</sup> The same day, he sent a message to Speaker of the House Sam Rayburn of Texas; copies went to Whittington and Overton.<sup>53</sup> The letter was drafted by Budget Director Harold D. Smith. Roosevelt said the "joint plan represents a beginning in the solution of the problems of the Missouri Valley. But it is only a beginning, for other matters not within the scope of this joint report bear very materially upon the entire region." Roosevelt believed the policy issues confronting water resources development in the Missouri basin needed to be administered by a Missouri Valley Authority.

The senators were unwilling to relinquish their legislative prerogatives. The flood control debate revealed that the consumptive-use advocates generally opposed a regional authority for the Missouri basin. But they hesitated to vote for a development bill without at least the preference provision in the O'Mahoney amendment. Fortunately for proponents of the bill, on 27 November Senator O'Mahoney reassured the consumptive-use advocates from the Senate floor that no agreement had been made sacrificing the rights of the arid-land states and that Overton was "not asking [for] any such sacrifices." <sup>54</sup>

The amendments were reformulated in conference between Overton and O'Mahoney and their supporters.<sup>55</sup> A minor issue related to the reworded language was the apparent power of a governor to veto federal actions. Overton was unwilling to allow any such dilution of federal authority. The O'Mahoney supporters yielded, and the veto provision in paragraph (b) of the original proposal was deleted. The conferees agreed to retain consultation among the involved federal and state entities. O'Mahoney maintained that although the governors would not have veto powers, federal-state cooperation would protect the states' interests.

The conferees readily dispensed with other less thorny issues. With

minor modifications, the O'Mahoney amendment was retained as redrafted at the Chicago Water Conservation Conference. The slightly revised amendment referred only to works "herein" authorized and deleted reference to projects "hereafter" authorized. As Senator O'Mahoney stated, the language of the preference provision made no attempt to prejudice a future Congress. The preference provision negated the need for the Case amendment in the House version of the bill, and it was deleted. Senator Clark's amendment for a Missouri River commission also was taken out of the bill.

O'Mahoney and Overton thus brokered the deal that became law. The initial conferences at Omaha involving the Corps of Engineers, the Bureau of Reclamation, and state officials led to section 9 of the flood control bill. No hearings were held on the engineering agreement after it was consummated. The subsequent agreement in Washington between Overton and O'Mahoney related to policy. It allowed for implementation of the "ultimate development" concept without concessions on either the engineering or policy issues.

The Senate approved the omnibus flood control bill on 1 December by a voice vote. The anticipated floor fight had been averted. Senator Murray even refrained from proffering an amendment related to establishing an MVA. (Congressional leadership promised that the next Congress would conduct hearings on his measure.) Overton requested a conference with the House. On 9 December, the conference committee accepted all the Senate amendments. The Senate and House both approved the conference committee report on 13 December, sending the final bill to the President.<sup>56</sup>

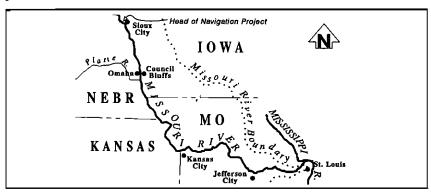
On 22 December, Roosevelt signed the flood control bill.<sup>57</sup> He referred to the legislation as "a step forward in the development of our national water policies." He lauded the plan for calling on states affected by proposed projects to express their positions. But he added that "of course, the establishment of such a procedure should not be interpreted by anyone as an abrogation by the federal government of any part of its powers over navigable waters."

Roosevelt addressed the issue of authorization-appropriation. The tenuous nature of dam-building legislation at the authorization stage was evidenced in the President's remarks. He stated that authorized projects listed in the bill would "augment the backlog of public works available for prompt initiation, *if necessary*, in the postwar period." He intended to submit estimates of appropriations or approve allocations of funds only for those projects having "important and direct value to the winning of the war." And Roosevelt stipulated that his approval of Missouri River

basin projects in the flood control bill was "not to be interpreted as jeopardizing in any way the creation of a Missouri Valley Authority."

The MVA supporters had settled for a promise rather than disrupting the legislative process leading to the flood control bill. Because of issues other than those involving the Missouri basin, the rivers and harbors bill had to be put aside until the next Congress convened. The Senate adopted the preference provision without debate, as did the House.<sup>58</sup>

When the rivers and harbors bill reached the conference stage, conflict arose over issues involving other basins. <sup>59</sup> Positions put forth showed the strength of western bloc senators regarding reclamation matters and illustrated the significance of the coordination by O'Mahoney and Overton. The House conference committee refused to strike an amendment in the House bill exempting the Central Valley, California, land from reclamation water limitations. Western senators opposed the amendment and the two groups became deadlocked. When the bill was sent back to the Senate, New Mexico Senator Carl A. Hatch, chairman of the Public Lands Committee, and Wisconsin Senator Robert Marion LaFollette, Jr., threatened to strike the amendment if Chairman Bailey sought its approval. Bailey decided to lay the bill over until the next Congress.



Missouri River Navigation Channel.

When Congress reconvened in January 1945, it dealt with a revised omnibus rivers and harbors bill printed as S. 35. Some provisions of the original legislation dealing with the Missouri River were omitted by the Commerce Committee because they were part of the Flood Control Act of 1944. The O'Mahoney-Millikin amendment, with the preference provision, was retained. Also retained was the provision authorizing construction of a nine-foot navigation channel from Sioux City to the Missouri's confluence with the Mississippi River just above St. Louis. No additional hearings were held on the provisions. The bill passed the

Senate on 1 February and the House on 22 February.

President Roosevelt signed the rivers and harbors bill into law on 2 March 1945.<sup>60</sup> Shortly thereafter he requested a \$4.4 million appropriation to be applied to the approved Missouri River basin water resources development program.<sup>61</sup> Funding remained separate for the authorized Bureau of Reclamation and Corps of Engineers programs, but irrigation, hydroelectric, navigation, and flood control developments were combined for planning and programming purposes. Multi-purpose development for the Missouri became a reality.

## Chronological Summary of Reports, Conferences, and Congressional Action on the Pick-Sloan Plan

5/13/43	The Flood Control Committee of the House of Representatives, by resolution, directed the Corps of Engineers to study the flood problem from Sioux City to the mouth along the main stem. (House Document 475.)
8/10/43	Missouri River Division Engineer's report sent to the Chief of Engineers. (House Document 475.)
8/23/43	Division Engineer's report approved by the Board of Engineers for Rivers and Harbors.
8/28/43	Reports of Division Engineer and Board of Engineers sent to Bureau of Reclamation.
10/14/43	Conference between field representatives of Corps of Engineers and Bureau of Reclamation in Omaha to discuss coordinating their respective plans. (Hearings on S. 555 before Subcommittee of the Committee on Commerce, 20 April 1945.)
12/31/43	Reports of Division Engineer and Board of Engineers, with comments of the Bureau of Reclamation, Federal Power Commission, and Department of Agriculture, sent to the Chairman, Committee on Flood Control, by the Chief of Engineers. (House Document 475.)
1/7/44	Report sent to the Bureau of Budget by the Secretary of War. (Letter from Bureau of Budget to Secretary of War, 2/16/44.)
2/16, 17, and 23/44	Hearings on "Pick Plan" before the House Committee on Flood Control.
2/28/44	The Secretary of War transmitted the Chief of Engineer's

report, together with accompanying papers, to the Speaker

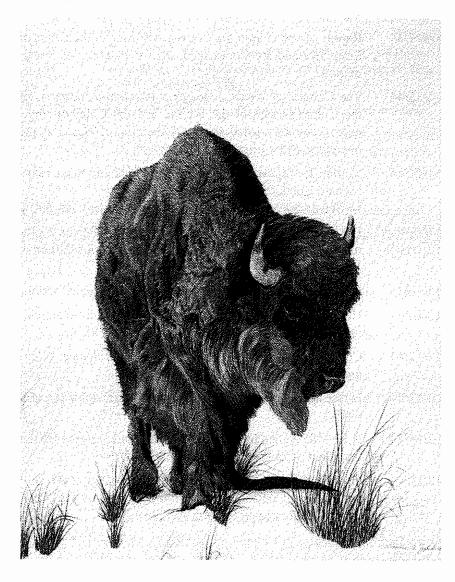
of the House. (House Document 475.)

3/21/44 Senate 1812 introduced in Senate by Senator Clark of Missouri. Contained features of Pick report and included provision for creating "Missouri River Commission." Referred to Committee on Commerce. (Congressional Record, 51-61.) 3/27/44 H.R. 4485 introduced in the House by Congressman Whittington. Included provisions of the Pick report. (Congressional Record, 3330.) 3/29/44 H.R. 4485 committee to Committee of the whole house. 4/14/44 Bureau of Reclamation Plan for Conservation, Control and Use of Water Resources of the Missouri River Basin (Sloan plan) sent from Bureau's Board of Review to the Commissioner. (Senate Document 191.) 4/20/44 Sloan plan sent to the Chief of Engineers for comment. 4/25/44 Chief of Engineers comments on the Sloan plan sent to the Bureau of Reclamation. 4/28/44 Sloan plan together with comments of interested federal agencies transmitted to the Secretary of the Interior. (Senate Document 191.) 5/1/44 Sloan plan sent to the President through the Bureau of the Budget by the Interior Secretary. 5/5/44 Senator O'Mahoney introduces Sloan plan and report was printed as Senate Document 191. (Congressional Record, 4124.) 5/9/44 H.R. 4485 (including Pick plan) passed by the House. (Congressional Record, 4314.) 5/10/44 H.R. 4485 introduced in the Senate. 5/29 to Hearings on H.R. 4485 before Subcommittee of Commit-6/15/44 tee on Commerce in the Senate. 6/22/44 H.R. 4485 reported by Senate Commerce Committee chairman with amendments. 9/1/44 Congressman Case of South Dakota referred to resolution of Missouri River States Committee and asked Congress

> and the President to call for coordination of the reports of the Chief of Engineers and the Bureau of Reclamation.

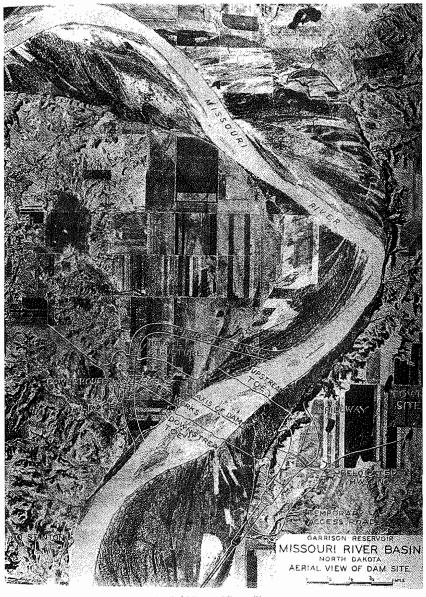
(Congressional Record, A 1498.)

10/16 and 17/44	Committee composed of two representatives each from the Corps of Engineers and the Bureau of Reclamation met in Omaha to review the engineering features of the two plans. The plans were coordinated. (Senate Document 247.)
10/17/44	Report of the Committee Action was sent to the Chief of Engineers and the Commissioner of the Bureau of Reclamation.
10/25/44	The Committee report, together with recommendations of the Commissioner of the Bureau and the Chief of Engi- neers, was forwarded to the Secretary of War and the Secretary of the Interior.
11/21/44	Committee report, which coordinated Pick and Sloan plans (Senate Document 247), was introduced by Senator O'Mahoney. (Congressional Record, 8343.)
11/21 thru 12/1/1944	H.R. 4485 with amendments proposed by Senate Commerce Committee debated in Senate. (Congressional Record, 160-167.)
12/1/44	H.R. 4485 passed by Senate. (Congressional Record, 8794.)
12/1/44	House agreed to conference with Senate on Senate amendments to H.R. 4485. (Congressional Record, 8834.)
12/12/44	Conference report presented in House and Senate. (Congressional Record, 9409.
12/12/44	House agreed to Conference report. (Congressional Record, 9419.)
12/18/44	H.R. 4485 signed by Speaker of House and presented to the President. (Congressional Record, 9807.)
12/22/44	Coordinated plan (H.R. 4485), as incorporated in the Omnibus Flood Control Act of 1944, approved by the President. (Congressional Record, A 5279.)

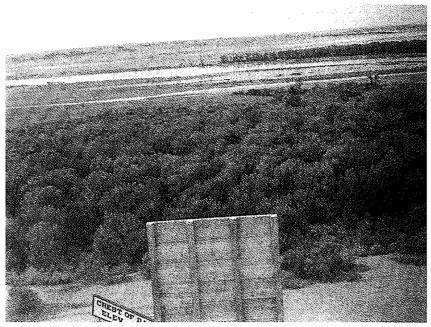


Buffalo by Sallie Zydek

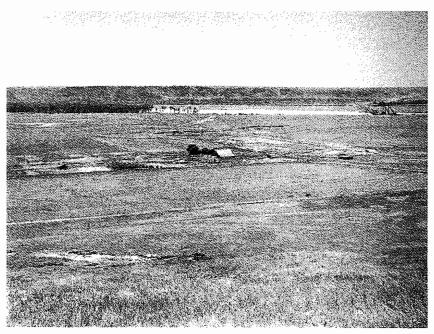
## Constructing a Big Dam on The Missouri River



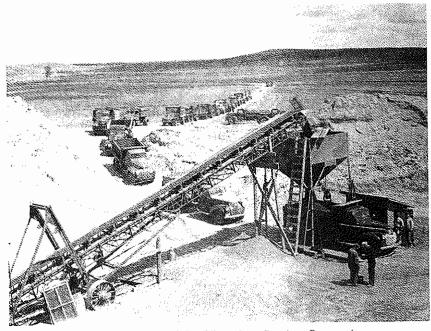
Aerial View of Dam Site.



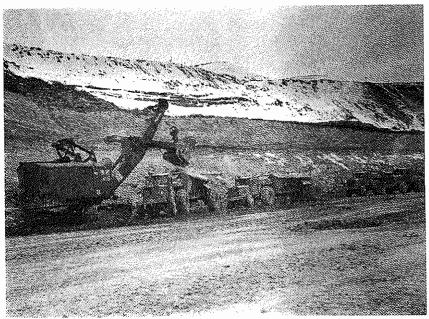
View of Dam Site at East Abutment Looking West Along Axis of Dam. August 1946.



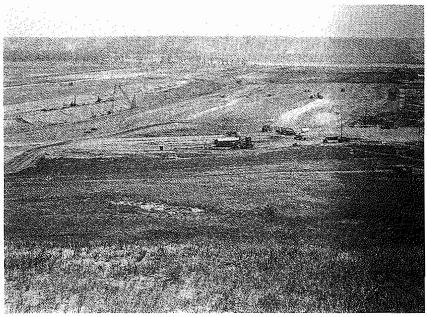
On Centerline of Dam Looking Southeast. July 1947.



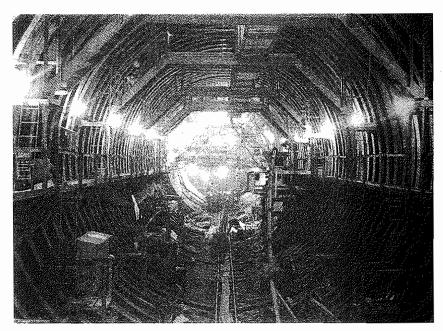
Loading Trucks for Stabilized Base from Pervious Borrow Area, Looking Northeast. May 1947.



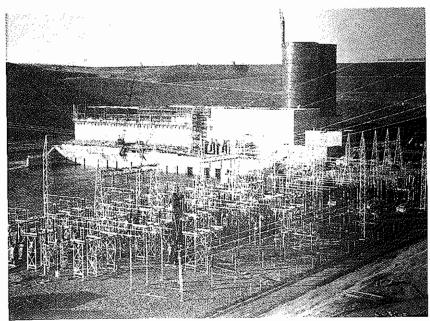
Power Shovel and Euclid Wagons Used in Excavation Operations for Powerhouse Area. December 1947.



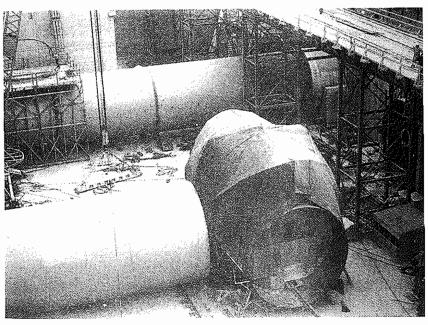
Embankment Operations, Downstream Toe, Right Center, and Upstream Toe, Left Center, July 1948.



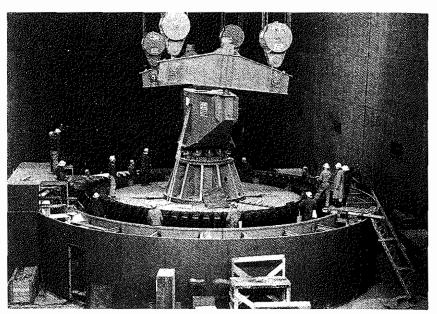
Invert and Spring Line Concrete Tunnel Lining Section Completed; Jumbo in Position for Placing Forms for Arch Pour in Background. December 1948.



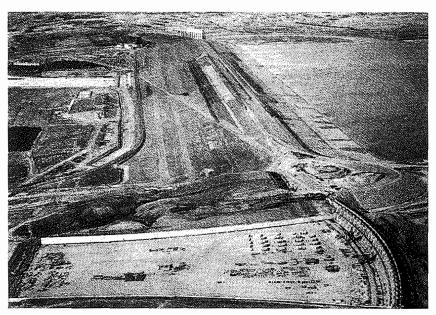
Construction of Powerhouse and Surge Tanks Underway at Center with Switchyard in Foregound: West Abutment of Main Embankment is in Background, December 1954.



Penshock Area Sacostro e su ria con Lucia e Namber One e Long e Bare (co. 1977) Maria (1997)



Powerhouse View Showing Rotor for Generator Unit Being Lowered Into Place Inside Stator, March 1955.



View From Southeast of Damsite Looking Northwest Showing Spillway Structure in Foreground and Main Embankment at Center: Powerhouse and Intake Structure Appear in Far Center: Reservoir Pool is at Right and in the Background. November 1954.